



Good practice proposal – Building one access point to dispersed data sources

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Description of the GP (1)



Datasets maintained at a local level independently by different municipalities often:

- Are very similar: have the same content, data model, data structure, portrayal etc.
- Have different spatial extend limited by boundaries of municipalities



Good example is cadastral data in Poland that is maintained by 380 districts (powiaty)

- Districts maintain the cadastral datasets in the same national data model
- Each district maintains cadastral dataset limited spatially to its boundaries
- Each district is obliged by law to publish network services providing dataset the district maintains
- This results in 380 WMS services published by districts providing cadastral datasets



**Let's create a proxy service that integrates
local services**



Benefits



One endpoint for a particular dataset (e.g. cadastre) for the entire country

- It saves user's time – the user doesn't have search for endpoints of view services published by different districts
- It hides the complexity of the SDI implementation – from the user perspective integrated service provides access to one seamless dataset





Users should access dispersed datasets from a single endpoint



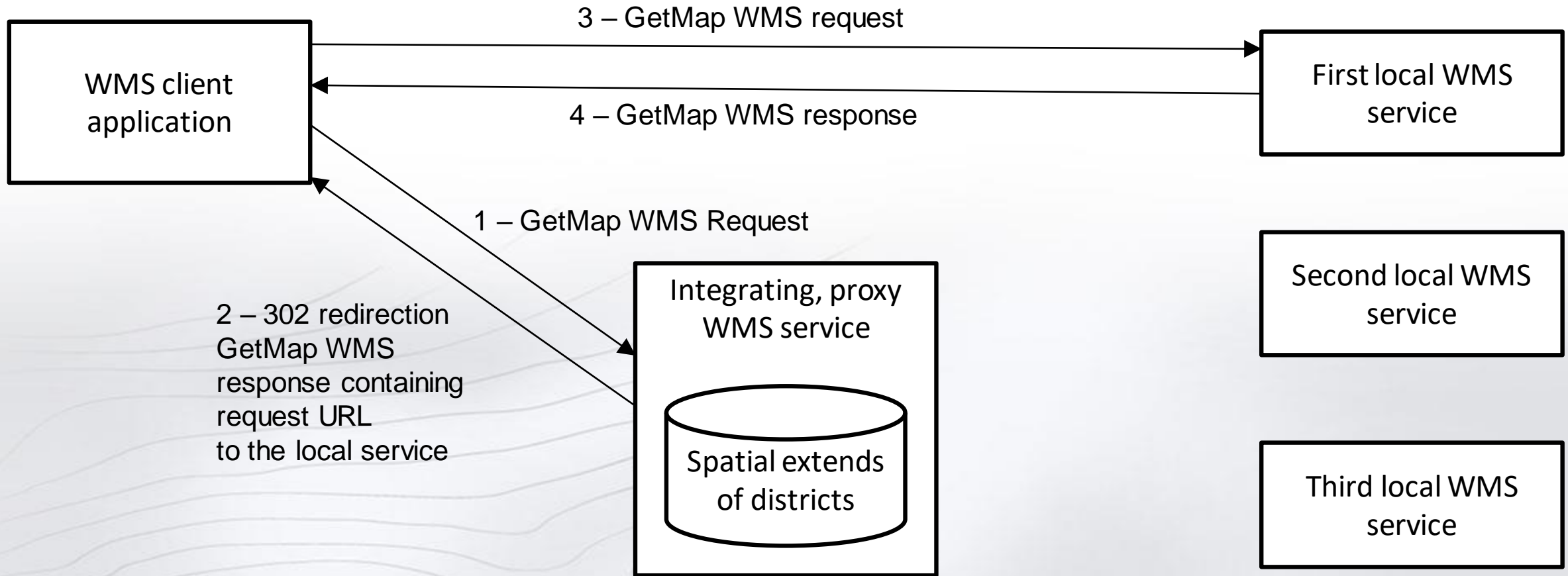
This can be for example done as:

- **a single national endpoint per dataset integrating services published by municipalities**
- **a single European access point per INSPIRE theme integrating services provided by the Member States**

How it works? (1)



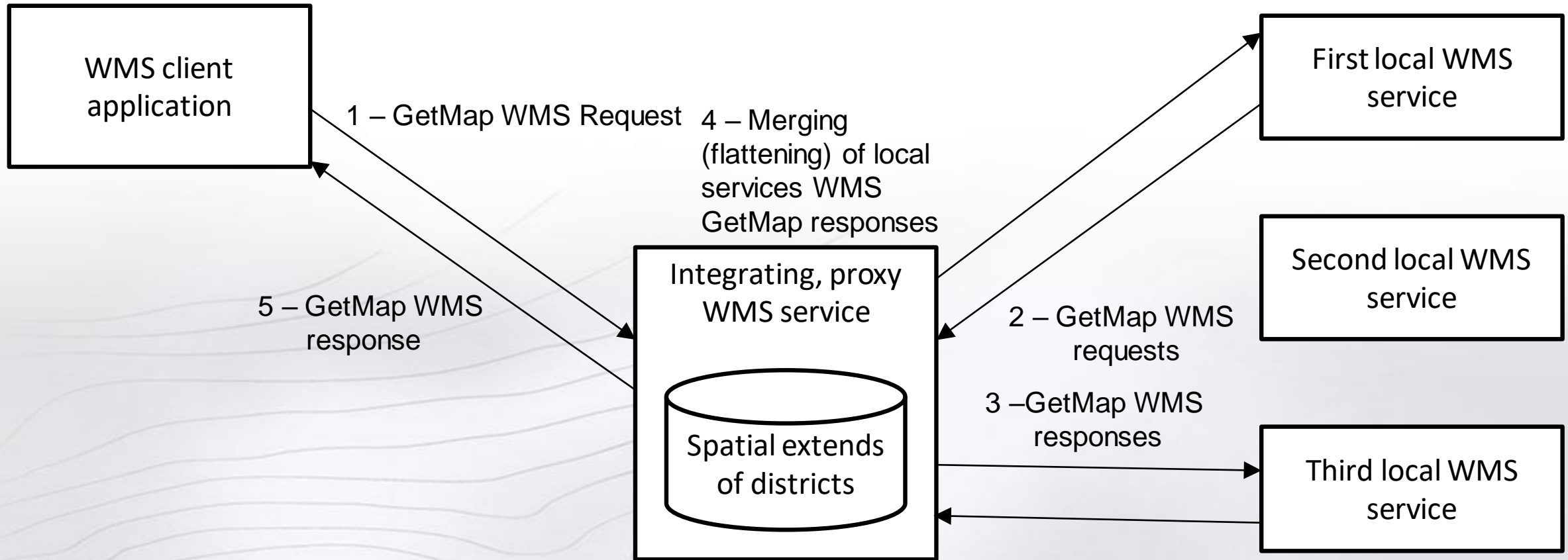
Request forwarded to one local service



How it works? (2)



Request forwarded to many local services



Evidence of implementation (1)

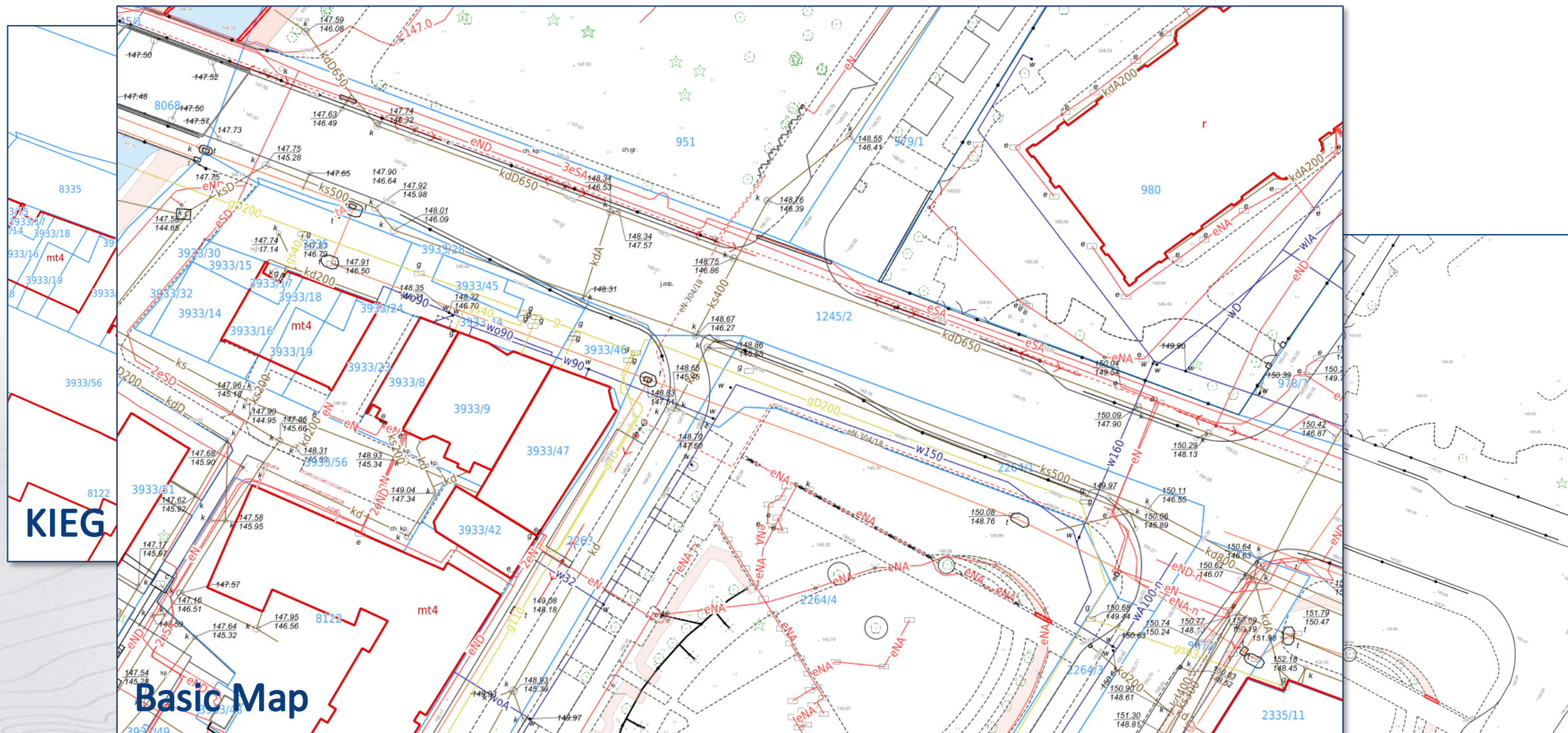


There are following integrating WMS services available:

- KIEG – providing cadastral data (cadastral parcels and buildings)
<https://integracja.gugik.gov.pl/cgi-bin/KrajowaIntegracjaEwidencjiGruntow>
- KIUT – providing utility infrastructure data (electricity, water, telecommunication, sewers, gas and other networks)
<https://integracja.gugik.gov.pl/cgi-bin/KrajowaIntegracjaUzbrojeniaTerenu>
- KIBDOT – providing high scale topographic data (containing the location of fences, trees, curbs, etc.) <https://integracja.gugik.gov.pl/cgi-bin/KrajowaIntegracjaBazDanychObiektowTopograficznych>



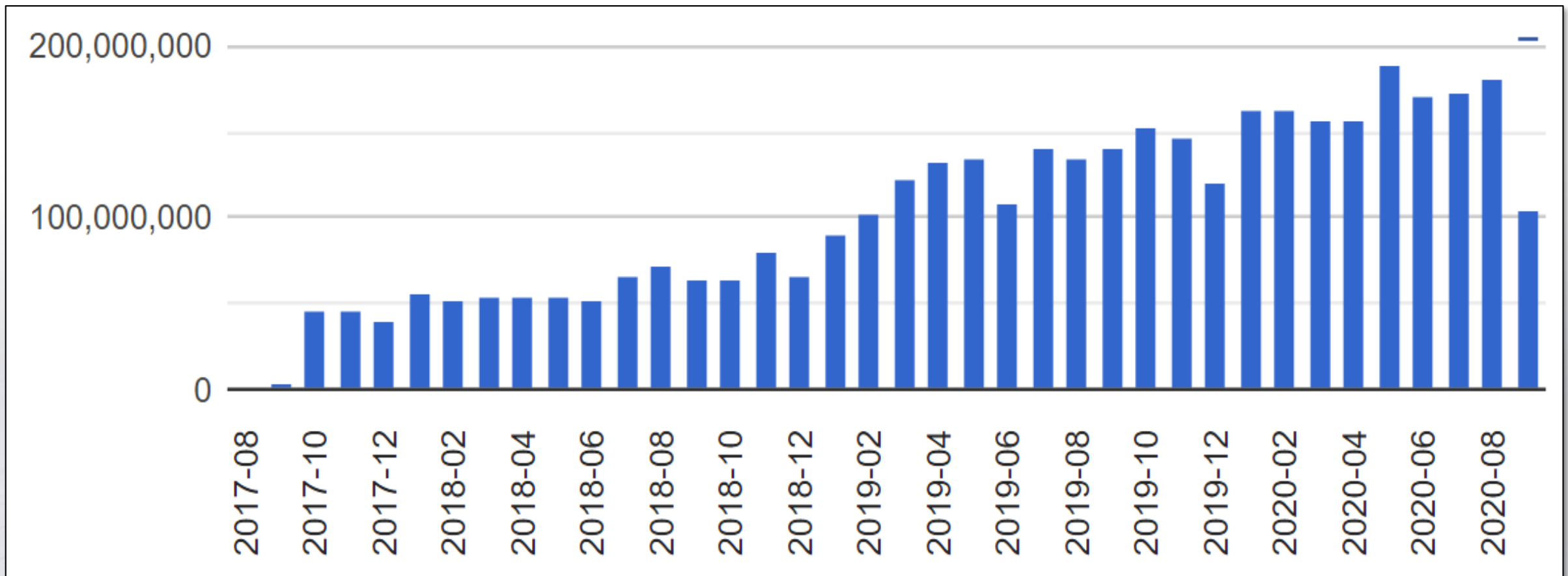
Evidence of implementation (2)



Evidence of implementation (3)

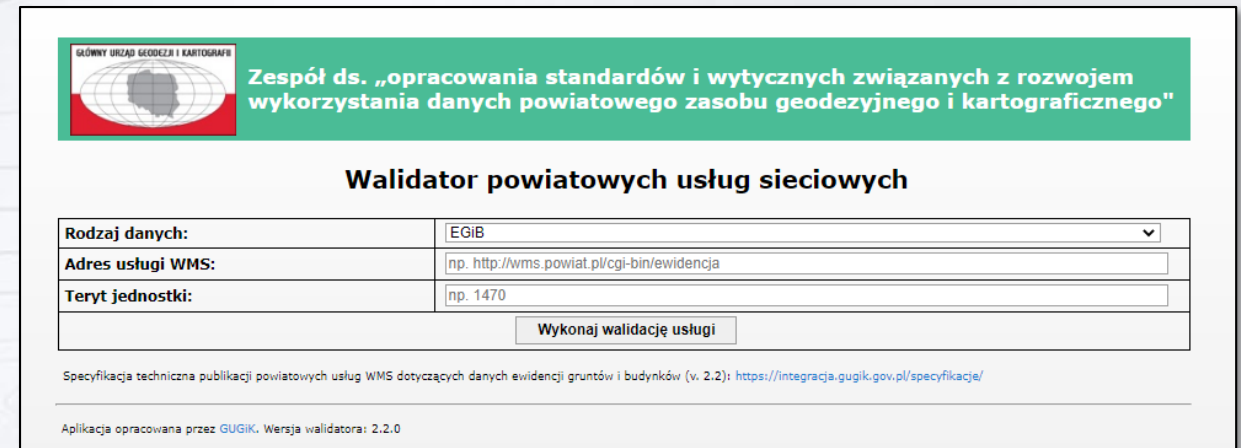
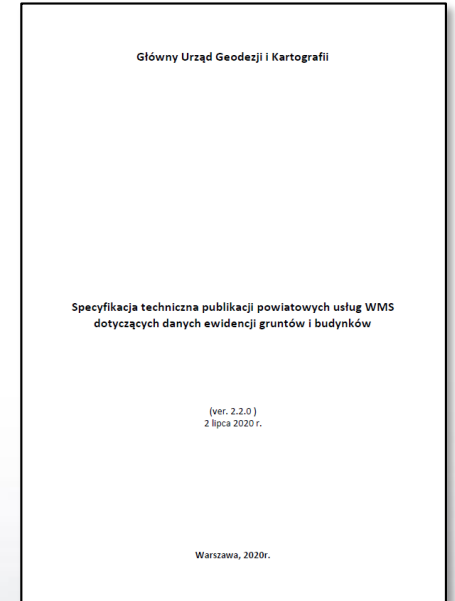


Monthly number of request to the KIEG service





- The standards are available for
 - KIEG
 - KIUT
- Validator application



GLÓWNY URZĄD GEODEZJI I KARTOGRAFII

Zespół ds. „opracowania standardów i wytycznych związanych z rozwojem wykorzystania danych powiatowego zasobu geodezyjnego i kartograficznego”

Walidator powiatowych usług sieciowych

Rodzaj danych:	EGIB
Adres usługi WMS:	np. http://wms.powiat.pl/cgi-bin/ewidencja
Teryt jednostki:	np. 1470

Wykonaj walidację usługi

Specyfikacja techniczna publikacji powiatowych usług WMS dotyczących danych ewidencji gruntów i budynków (v. 2.2): <https://integracja.gugik.gov.pl/specyfikacje/>

Aplikacja opracowana przez GUGIK. Wersja walidatora: 2.2.0

Limitations



Additional resources are required to:

- create and maintain a proxy service
- develop standardization documents
- standardise local services





Live demo



The screenshot displays the National Geoportal interface. The main map area shows a cadastral plan with red-outlined parcels (e.g., 1248/1, 1248/2, 1248/3, 1248/4, 1248/5, 1250/1, 1254/1, 1254/2, 1257, 4567, 4568, 4571) and utility lines. The interface includes a top navigation bar with 'FILE', 'VIEW', 'MEASUREMENTS', 'DTM', and 'SEARCHES'. A 'Map contents' panel on the right lists various data layers:

- Addresses and streets
- Integration of cadastral data
- Integration of utilities networks
- Topographic objects
- Integration of local development plans
- Real estate prices
- Local map portals
- Grids and coordinate systems
- Points of interest
- Data of other organisations
- Landform
- Data acquisition status
- Indexes
- Specialist data
- Topographic maps
- Orthoimagery
- Archival data

At the bottom of the map, the coordinate system is specified as 1992 (EPSG 2180) with coordinates: X: 483109.61 Y: 673844.15 N: 52°11'11.84" E: 21°32'37.91". The current scale is 1:500. A scale bar at the bottom right indicates 0 to 20 meters.



Thank you for your attention

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